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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/669,110

09/23/2003

Steven H. Peterson

3115

24335

7590

03/22/2006

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EXAMINER

EVANS, FANNIE L

ART UNIT

PAPER NUMBER

2877

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

A

## Office Action Summary

Application No.

10/669,110

Applicant(s)

PETERSON ET AL.

Examiner

F. L. Evans

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 21-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 1-11, 21 and 23-25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over McCarthy (US 5,137,364) in view of Nakanishi et al (US 6,534,794), both newly cited.

McCarthy discloses a color measurement instrument that has essentially every feature set forth in the claims except the temperature changing element/heating element. McCarthy discloses a heating and/or cooling system (line 19 in column 5) and a device for the creation or removal of heat (claims 6 and 18). The color measurement instrument of McCarthy comprises: illuminator means (2) for illuminating a sample (9, Fig. 4); color measurement means (3) for measuring light reflected from said sample (9, Fig. 4); temperature changing device/system (9, Fig. 1b-lines 15-20 in column 5) for changing the temperature of said illuminator means (2); temperature sensing means (8) for sensing the temperature of said illuminator means (2); and control means (Fig. 1c) responsive to said temperature sensing means (8) for

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controlling said temperature changing means to control the temperature of said illuminator means (2).

The illuminator means includes a light emitting diode (lines 1-3 in column 3 and lines 24-26 in column

4). The illuminator means includes an illuminator and a thermally conductive base supporting the

illuminator (lines 32-35 in column 4). The temperature changing device/system is mounted on the

thermally conductive base (lines 27 and 28 in column 3). The light sensing/measuring means comprises a

photodiode (lines 3 and 4 in column 2). Applicant's attention is directed to McCarthy in its entirety with

particular attention directed to lines 1-38 in column 3, lines 18-35 in column 4, lines 15-20 in column 5,

claims 4-6 and claims 16-18.

Nakanishi et al disclose the use of a resistor as the heating element (81) in a feedback loop for maintaining the temperature of a light emitting diode within a predetermined temperature range.

Applicant's attention is directed to Nakanishi et al in its entirety with particular attention directed to lines 37-41 in column 3 and lines 26-36 in column 6.

At the time the invention was made, it would have been obvious to one with ordinary skill in the art to use any conventional heating element in the color measurement instrument of McCarthy, including a resistor as taught by Nakanishi et al, for controlling the temperature of the light emitting diode(s). The use of a simple structure such a resistor would have resulted in a light emitting unit with high output power at a low cost (lines 37-41 in column 3 in Nakanishi et al).

Claim 22 is rejected under 35 U.S.C. § 103(a) as being unpatentable over McCarthy (US 5,137,364) in view of Nakanishi et al (US 6,534,794) as applied to claims 1-11, 21 and 23-25 above, and further in view of McCarthy (US 5,838,451), of record.

The above proposed color measurement instrument has essentially every feature set forth in the claim except a thermistor as the temperature sensor.

McCarthy ('451) disclose a color measurement instrument having feedback means for controlling the temperature of the light emitting diode source. The temperature sensor used by McCarthy is a

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thermistor (lines 51-53 in column 2 and claim 8). Applicant's attention is directed to McCarthy in its entirety with particular attention directed to Fig. 10 and the text pertaining thereto.

At the time the invention was made, it would have been obvious to one with ordinary skill in the art to use a thermistor as the temperature sensor in the above proposed color measurement instrument because of the teaching of such use in the color measurement instrument of McCarthy ('451). Attention is directed to the fact the McCarthy is the inventor of both US 5,137,364 and US 5,838,451.

*Response to Arguments*

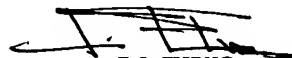
Applicant's arguments with respect to claims 1-11 and 21-25 have been considered but are moot in view of the new ground(s) of rejection.

*Fax/Telephone Numbers*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner whose telephone number is (571) 272-2414.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**F. L. EVANS**  
**PRIMARY EXAMINER**  
**ART UNIT 2877**

file  
March 18, 2006